

## Re: Happy Cows Project Unhappy update -- Well DC-09



Rene Fuentes to: Sheila Fleming

Cc: Eric Winiecki, Jennifer MacDonald, Marie Jennings, Michael Boykin

12/14/2012 11:15 AM

Given that the drillers are now bringing back more casing and that they will also bring jacks to pull the casing out it may be iffy for the sonic rig. Since we have not seen it in action it is hard to tell, but there have been a couple of wells where the drilling was relatively fast and easy for this large rig, but the pulling out of the casing was hard. I think that we would need to discuss this with the Ada driller persons (whoever runs it and knows it capabilities). The formation out here is basically sand (of different colors at different depths) and some medium gravel zones here and there. But the depths have been erratic in getting to the water. I had estimated 100 feet below surface for DC-09, and we are at 155 ft and no water in sight. We should warn Ada about the depths and the hard retrievals and see if they have an opinion. I do not know how much they have tested their sonic system or what they think the capability is for this setting.

## René

René Fuentes P.E., P.HG.

\*\*\*\*\*\*\*\*\*

Hydrogeologist Office of Environmental Assessment USEPA Region 10 (0EA-095) 1200 Sixth Ave., Suite 900 Seattle, WA 98101

phone: (206) 553-1599

Sheila Fleming Sorry accidentally hit send. Do you think the son... 12/14/2012 10:44:58 AM

Sheila Fleming/R10/USEPA/US From: Rene Fuentes/R10/USEPA/US@EPA To:

Cc: Jennifer MacDonald/R10/USEPA/US@EPA, Eric Winiecki/R10/USEPA/US@EPA, Marie

Jennings/R10/USEPA/US@EPA, Michael Boykin/R10/USEPA/US@EPA

12/14/2012 10:44 AM Date:

Re: Happy Cows Project Unhappy update-- Well DC-09 Subject:

Sorry accidentally hit send. Do you think the sonic rig could be used to drill to depths greater than 155+ feet based on the soil type?

Sent from my mobile. fleming.sheila@epa.gov Cell: 206-303-8126

> Sheila Fleming Hi Rene. Based on the soil types, do you think... 12/14/2012 01:42 PM EST

From: Sheila Fleming To: Rene Fuentes

Cc: Jennifer MacDonald; Eric Winiecki; Marie Jennings; Michael Boykin

12/14/2012 01:42 PM EST Date:

Re: Happy Cows Project Unhappy update-- Well DC-09 Subject:

Hi Rene. Based on the soil types, do you think Ada's sonic rig could drill more at least

Sent from my mobile. fleming.sheila@epa.gov Cell: 206-303-8126

Rene Fuentes Group, We have just had a delay. Well DC-09... 12/14/2012 10:01 AM MST

From: Rene Fuentes
To: Sheila Fleming

Cc: Jennifer MacDonald; Eric Winiecki; Marie Jennings; Michael Boykin

Date: 12/14/2012 10:01 AM MST

Subject: Re: Happy Cows Project Unhappy update-- Well DC-09

## Group,

We have just had a delay. Well DC-09 has gone down to 155 feet, which is all the casing we had available at the site, and we have **NOT hit any water**. We are waiting to see how much further they are willing to drill with the present casing size (which they are going to pick up today together with some 8 inch casing which we were going to need for DC-1). It is not clear why we are not finding water in the sand box, since based on DC-14 should have been at less than 130 feet (I originally estimated 100 feet to water here based on that -- so much for being the ones who break ground on getting the original data for the area).

Not sure where we are going now, but everyone is contacting the next level up to make decisions that are getting harder. Worst case would be to have to abandon this well and move over to start with 8 inch casing to minimize the friction on the smaller casing as we go deeper. We are hoping to be able to drill "a few more feet" with the 6 inch casing we are using now and doing some serious hoping to hit the water table.

We called Mike B. and he is aware of the issues as of 830 am. I am still assuming that this is a fairly critical well.

Also note that we have NOT found shallow perched water in any of the drill sites. And in general all the drilling has been in very nice sand and in a few cases gravels. What does not make much sense is the water level pattern in this well which was my hope to have more consistency with DC-14 so we could plan for DC-01.

One more major issue has just developed-- due to this setback we are running into the holidays and the drillers would not work past Dec 21st at mid day. This raises the question of how may wells we want to do if we want to not remobilize the drilling equipment a second time after the holidays. My suggestion is that we reconsider wells DC-5, DC-6, and DC-8, and possibly drop them given the new depth problem. If we can get moving again by tomorrow and get this well done we would have DC-01, HK-10, HK-11, and HK-12 left as the first priority wells in the next few days before the holidays, which may be doable.

Please discuss this and let us know your group opinion. We are relocating back to Zillah wastewater treatment plant now due to lack of equipment at this moment. We are about to leave DC-09 in a few minutes, but we can talk or have more emails when we get resettled in Zillah.

## René

\*\*\*\*\*\*\*\*\*\*

Office of Environmental Assessment USEPA Region 10 (0EA-095) 1200 Sixth Ave., Suite 900 Seattle, WA 98101

phone: (206) 553-1599 \*\*\*\*\*\*\*\*\*\*